UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203

11 AUG 1981

Honorable Roger R. Goyette
The Commonwealth of Massachusetts
House of Representatives
State House
Boston, MA 02133

Dear Representative Goyette:

This is in response to your recent inquiry to Mr. Ciavattieri regarding PCBs in New Bedford Harbor. As you may know, the Environmental Protection Agency has been involved in both collecting and evaluating much of the data concerning PCBs in both the sediment and biological samples taken from New Bedford Harbor, and has kept in close contact with both state and private organizations involved with the contamination problem.

The 5 part per million (ppm) limit you refer to is the Food and Drug Administration's action level for restricting the entrance of fish or shellfish into interstate commerce. My staff has spoken with the New England Regional FDA Laboratory Director, and have been told that their analyses always measure total PCB content. This figure would then be the summation of all PCB fractions present, (e.g., both 1254 and 1016). The jurisdiction for regulating the PCB content of fish and shellfish entering intrastate commerce lies with the Massachusetts Departments of Marine Fisheries and Public Health. These Departments have also recognized 5 ppm as a level which adequately protects human health, and have set it as their action level for the entrance of seafoods into intrastate commerce.

As you have pointed out, it is the congregate PCB content that the regulatory agencies are concerned with. I think that, as we look at the data collected in the past, there were cases where only Aroclor 1254 was identified, leaving unreported what may have been the most significant portion of the contamination. To further complicate an already difficult analytical task, biodegradation of PCBs occurs as they stay in the environment. This biodegradation is of a unique type which can actually transform the 1242 compound into 1254, or render the entire PCB mixture into a form which does not resemble either type of PCB. Frequently, a laboratory will express results as 1254 for the sake of convenience, even if it is not precisely the 1254

mixture. However, recently the capabilities for analyzing complex samples of these types have improved dramatically. Despite this, there is no simple way to know what technique a laboratory uses without asking. Both EPA and FDA will always report total PCB content of samples collected from any source, similar to the congregate formula you mention in your letter, even if it is expressed as only one PCB mixture.

I hope this explanation answers your concern in this matter. If I can be of any further assistance please do not hesitate to call or write.

Sincerely yours,

Lester A. Sutton, P.E.
Regional Administrator